

Chapter 3

Regulatory Reform Unleashes the Economy

The Trump Administration's focus on deregulation has led to historic reductions in costly regulation. The Administration has cut more than two significant regulations for each new significant regulation it has finalized, while maintaining critical protections for workers, public health, safety, and the environment. This fundamental shift in how the Federal government views regulation breaks with the decades-long accumulation of regulatory mandates that place high costs on the U.S. economy.

The Council of Economic Advisers estimates that after 5 to 10 years, this new approach to Federal regulation will have raised real incomes by \$3,100 per household per year by increasing choice, productivity, and competition. Twenty notable Federal deregulatory actions alone will be saving American consumers and businesses about \$1,900 per household per year after they go into full effect. These results show that the Trump Administration's deregulatory actions across a vast array of American industries are among the most significant in U.S. history.

Beyond eliminating outdated or costly regulations established by prior administrations, the Trump Administration has also sharply reduced the rate at which new Federal regulations are introduced. The ongoing introduction of these costly regulations had previously been subtracting an additional 0.2 percent per year from real incomes, thereby giving the false impression that the American economy was fundamentally incapable of anything better than slow growth in real incomes and gross domestic product. Now, consumers and

small businesses no longer need to dread the steadily accumulating costs of new Federal regulations.

Concurrently with the 2017 Presidential inauguration, real growth in gross domestic product began outperforming experts' forecasts where it was previously underperforming them. This should not come as a surprise, because studies that evaluate regulation across countries show that, all else being equal, countries that deregulated experienced more economic growth.

The new regulatory approach also significantly reduces consumer prices in many markets—such as those for prescription drugs, health insurance, and telecommunications—while it prevents price increases in other markets. Furthermore, deregulation removes mandates from employers, which especially benefits smaller businesses that, unlike their large companies, do not typically have a team of in-house lawyers and regulatory compliance staff to help them understand and comply with onerous regulations.

By increasing choice, productivity, and competition, the Trump Administration's regulatory reforms have cut red tape for American businesses and have extended them greater freedom to create jobs. Given the Administration's ambitious plans for this year, deregulatory benefits for consumers, job creators, and the economy are bound to grow further in 2020.

he Trump Administration's focus on deregulation has led to historic reductions in costly regulation, while protecting workers, public health, safety, and the environment. In January 2017, President Trump signed Executive Order 13771, "Reducing Regulations and Controlling Regulatory Costs," which is the cornerstone of the Administration's regulatory reform success. Executive Order 13771 requires Federal agencies to eliminate two regulations for every new regulation issued (2-for-1), and has created incremental regulatory cost caps. After Executive Order 13771 was issued in fiscal year (FY) 2017, there were 13 significant deregulatory actions and only 3 significant regulatory actions (4-for-1). In FY 2018, there were 57 significant deregulatory actions and only 14 significant regulatory actions (4-for-1). In FY 2019, there were 61 significant deregulatory actions and only 35 significant regulatory

actions (2-for-1). In total, the Trump Administration has exceeded its 2-for-1 goal, though many critics thought that even 2-for-1 would not happen.

The Council of Economic Advisers (CEA) previously looked at regulation across countries, finding that, all else being equal, countries that deregulated experienced more economic growth (CEA 2018a). We then related crosscountry regulatory indices to potential regulatory developments in the United States and estimated that regulatory reform had the potential to increase U.S. gross domestic product (GDP) by at least 1.0 to 2.2 percent over a decade.

This chapter reexamines the impact of the Administration's regulatory reform agenda now that it has been more completely implemented. It also takes an alternative approach to the CEA's earlier analysis and estimates the aggregate economic effects of deregulation by examining specific Federal rules and by accounting for the unique circumstances of the industries targeted by the rules, in addition to the rules and industries similarly analyzed in previous CEA reports. Our analysis utilizes an economic framework that situates each industry in a larger economy that includes market distortions from taxes, imperfect competition, and other sources. To date, we have conducted industry-specific analyses for 20 deregulatory actions.

The primary subject of this chapter is the impact of regulation and deregulation on nationwide real income. In contrast, guided by the Office of Management and Budget (OMB 2003), Federal agencies and OMB's Office of Information and Regulatory Affairs (OIRA) prepare and discuss related calculations of the benefits and costs of Federal regulations that do not typically calculate effects on GDP or nationwide real incomes. GDP and real income are of independent interest because they are important aspects of national accounting, and they are included in the budget forecasts made by OMB, the Social Security and Medicare Trustees, and the Congressional Budget Office, to name a few.² Moreover, economists and journalists routinely use GDP and real income as familiar metrics of the performance of the economy (Brynjolfsson, Eggers, and Gannamaneni 2018).

The CEA estimates that after 5 to 10 years, regulatory reform will have raised real incomes by \$3,100 per household per year.³ Twenty notable Federal deregulatory actions alone will be saving American consumers and businesses about \$220 billion per year after they go into full effect. They will increase real (after-inflation) incomes by about 1.3 percent. Many of the most notable deregulatory efforts in American history, such as the deregulation of airlines

¹ The CEA previously released research on some of the topics covered in this chapter; the text that follows builds on these reports (CEA 2019a, 2019b, 2019c).

² Estimates of the welfare effects of deregulation are therefore not enough by themselves to know, among other things, how GDP forecasts should be revised to account for the economic impact of deregulation.

³ Throughout this chapter, all dollar amounts are in 2018 dollars unless noted otherwise.

and trucking that began during the Carter Administration, did not have such large aggregate effects.

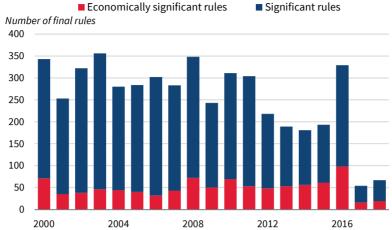
Regulatory reform not only reduces or eliminates costly regulations established by prior Administrations, but also sharply reduces the rate at which costly new Federal regulations are introduced. The ongoing introduction of costly regulations had previously been subtracting an additional 0.2 percent a year from real incomes, thereby giving the false impression that the American economy was fundamentally incapable of anything better than slow growth. Now, new regulations are budgeted and kept to a minimum.

In the first section of this chapter, we review the trends in Federal regulation before and after regulatory reform. We next turn to describing our general analytical approach and how we selected 20 deregulatory actions for analysis. The subsequent sections discuss the industry-specific deregulatory actions with the largest aggregate effects. We estimate large reductions in regulatory costs in the market for Internet access, healthcare markets, labor markets, and financial markets. Next, we estimate the additional cost-savings from reversing the trend of adding new regulations and regulatory costs each year. We also explain why some pre-2017 regulations carried disproportionate costs, and we offer a brief conclusion.

Reversing the Regulatory Trend

Before turning to industry-specific analyses, we provide an overview of the recent history of Federal regulation. This history is one of rapid growth until 2017, when the growth was halted by regulatory reform. Between 2000 and 2016, Federal agencies added an average of 53 economically significant regulatory actions each year (figure 3-1). In 2017 and 2018, the average dropped to less than 30. Figure 3-1 excludes rules that were deregulatory actions. As in previous years, in 2017 and 2018 a subset of the economically significant rules included in figure 3-1 are considered "transfer rules" and are not considered by OMB/OIRA to be either regulatory or deregulatory actions. When the transfer rules are excluded, in 2017 and 2018 the average number of economically significant regulatory actions falls to 10. The economically significant rules shown in figure 3-1 are those the Federal agencies and OMB/OIRA expected to have an aggregate impact on the economy of at least \$100 million or to adversely affect the economy in a material way (Executive Order 12866). Figure 3-1 also shows the total numbers of "significant" rules, which include economically significant rules and "other significant" rules that meet part of the definition for economic significance or are important for other reasons described in Executive Order 12866. Including economically significant and other significant rules, Federal agencies added an average of 279 significant regulatory actions per year between 2000 and 2016; the average fell to 61 in 2017 and 2018 after regulatory reform.

Figure 3-1. Significant Final Rules by Presidential Year, Excluding **Deregulatory Actions, 2000-2018**



Sources: George Washington University Regulatory Studies Center; Office of Information and Regulatory Affairs; CEA calculations.

Note: Presidential years begin in February and end in January of the following year. Rule counts for 2017 and 2018 exclude rules considered economically significant deregulatory actions. Before 2017, we estimate one economically significant deregulatory action per year.

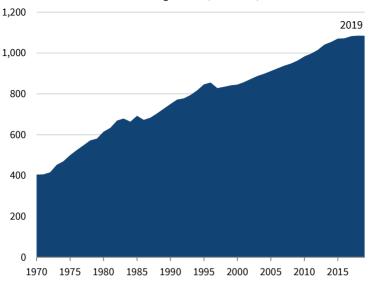
Last year, the CEA discussed in depth the cumulative economic impact of regulatory actions on the U.S. economy and explained why the regulatory whole is greater than the sum of its parts (CEA 2019b). Based on the annual accounting of rules published in OMB's annual Reports to Congress, we found that regulatory costs grew by an average of \$8.2 billion each year from 2000 through 2016. However, OMB's annual Reports for 2000–2016 only included 200 rules with fully quantified cost-benefit analyses. Over this same period, there were just over 900 economically significant rules; including other significant rules increases the count to almost 5,000. By definition, the regulatory actions expected to have the largest effects on the economy are included in the count of economically significant rules. However, this focus misses the sheer bulk of Federal regulation.

This year, we use textual analysis of the Code of Federal Regulations (CFR) to provide a broader and longer perspective on the cumulative regulatory burden. The CFR lists all regulations issued by Federal agencies and departments that are currently in force at the time of its publication; it is updated annually. RegData is a database applying textual analysis to the CFR that measures the restrictions imposed by the regulations based on the number of times words such as "shall" and "must" appear (Al-Ubaydli and McLaughlin 2014). Figure 3-2 shows the RegData index of regulatory restrictions from 1970 through 2019.

The total number of regulatory restrictions in the CFR nearly tripled between 1970 (the earliest available data) and 2016, increasing from 400,000

Figure 3-2. Regulatory Restrictions by All Agencies, 1970–2019

Restrictions in the Code of Federal Regulations (thousands)



Sources: Code of Federal Regulations; Mercatus Center RegData.

to almost 1.1 million. Aside from a few isolated year-to-year declines, the trend was steadily upward through 2016. From 2017 through 2019 the trend flattened and began to reverse, showing the first declines in regulatory restrictions that have been sustained for more than a single year. The turnaround in the growth of regulatory restrictions parallels the turnaround in the growth of regulatory costs that the CEA documented last year (CEA 2019b). Last year we reviewed estimates of the total regulatory costs in the United States that ranged from almost half a trillion to over a trillion dollars. Putting those estimates together with the total number of regulatory restrictions implies that each restriction is on average associated with somewhere between \$380,000 and \$1 million of regulatory costs.

Because deregulatory actions might involve words like "shall" and "must," the RegData index of restrictions shown in figure 3-2 cannot distinguish between the impact of regulatory and deregulatory actions. To explore this, we searched the text of two Final Rules published in the Federal Register—the 2016 regulatory action and the 2018 deregulatory action on short-term health insurance (discussed in more detail below and in CEA 2019a). The Federal Register text of the 2018 deregulatory action was longer and included 97 restrictions, compared to only 30 regulatory restrictions in the text of the 2016 regulatory action. It is not known to what extent this pattern generalizes to the RegData index of restrictions in the CFR. It seems likely that if it were possible to adjust

for restrictions included in the deregulatory actions taken since 2017, the index in figure 3-2 would show an even steeper decline beginning in 2017.

Figure 3-2 includes restrictions due to Federal agencies covered by Executive Order 13771 as well as restrictions due to independent Federal agencies that are not subject to Executive Order 13771 accounting. In recent years restrictions due to independent agencies account for about 15 percent of all restrictions. Since 1990, the number of restrictions due to independent agencies has grown by about 75 percent. Even though the independent agencies were not subject to Executive Order 13771 accounting, starting in 2017 the growth in their regulatory restrictions began to decline.

In addition to regulations, Federal agencies also issue guidance documents that advise the public about the agency's approach to adjudication or enforcement. Figure 3-2 does not include regulatory restrictions stemming from guidance documents because they are not part of the CFR. Moreover, guidance documents are non-binding, so in principle they cannot impose binding restrictions. However, a common concern is that agencies can treat guidance documents as binding in practice. Estimates suggest that some agencies issue anywhere from twenty to two-hundred pages of guidance documents for every page of regulations they issue (Parrillo 2019). To the extent those guidance documents impose regulatory restrictions that are binding in practice, the restrictions should ideally be added to the count of regulatory restrictions in figure 3-2. Although not reflected in figure 3-2, Federal agencies' guidance documents are subject to Executive Order 13771 accounting of the 2-for-1 requirement and regulatory cost caps. Significant guidance documents that increase costs are defined to be regulatory actions; guidance documents that yield cost savings are defined to be deregulatory actions.

Figure 3-3 shows how CFR regulatory restrictions on the manufacturing industry has grown over time, until regulatory reform. RegData uses further text analysis to determine the applicability of the regulatory restrictions to specific industries. The method uses search strings to identify phrases related to each industry (Al-Ubaydli and McLaughlin 2014). The resulting measure shows that regulatory restrictions on manufacturing remained roughly constant from the late 1970s until 1986. From 1986 through 2016, the number of regulatory restrictions almost quadrupled, from a little over 50,000 to more than 200,000. Again, starting in 2017, the upward trend reverses; the index shows sustained declines in regulatory restrictions on manufacturing from 2017 and 2018.

The regulatory reform results to date are notable accomplishments, given that it is difficult and time-consuming to identify opportunities for appropriate deregulatory actions. In a follow-up to Executive Order 13771, in February 2017 President Trump signed Executive Order 13777, "Enforcing the Regulatory Reform Agenda," which requires each Federal agency to designate a regulatory reform officer to oversee deregulatory initiatives and policies. In an innovative response to meet this challenge, the Department of Health and

Figure 3-3. Regulatory Restrictions on Manufacturing, 1970-2018

Restrictions in the Code of Federal Regulations (thousands)

Sources: Code of Federal Regulations; Mercatus Center RegData.

Human Services began exploring the use of artificial intelligence and machine-learning algorithms to identify opportunities for regulatory reform. As an example of the project's potential, the department discovered that 85 percent of its regulations created before 1990 have never been updated.

Because regulatory reform takes time, Federal agencies' efforts that began in 2017 are continuing to unfold. As a result, important pending and inprogress deregulatory actions cannot be included in this chapter. For example, our analysis does not include the deregulatory actions related to emission and fuel economy standards for automobiles; once finalized, the SAFE rule might be the largest deregulatory effort to date. Other important deregulatory efforts include the Department of Energy's reforms of regulatory restrictions on residential dishwashers and lightbulbs.

Analyzing Regulatory Reform

The Trump Administration uses regulatory cost caps to reduce the cumulative burden of Federal regulation. In addition to regulation-specific cost-benefit tests, the cost caps induce agencies to view all their regulations as a portfolio, which is more congruent with the experiences of the households and businesses subject to them. While pursuing their agency-specific missions, the regulatory cost caps provide the framework for agencies to evaluate regulatory

costs, to consider deregulatory actions, and to set priorities among new regulatory actions.

The CEA uses a pragmatic, streamlined approach to analyze the costs that regulatory actions impose on consumers, small businesses, and other economic actors. This approach requires making estimates of a small set of key parameters that describe the market that is primarily affected by the regulatory action in question. We follow a standard approach in cost-benefit analysis and rely on revealed preferences in markets (OMB 2003). For example, the price-elasticity of demand—which shows how consumers change their consumption in response to a price change—reflects the value consumers place on the good or service, relative to their next-best alternatives. For this reason, the price-elasticity of demand serves as one of the "sufficient statistics" to analyze the impact of a policy change on consumer welfare within the regulated industry (Chetty 2009).4 Detailed applications, and a sensitivity analysis, of our approach are given in our earlier reports (CEA 2019a, 2019b, 2019c).

To account for effects outside the regulated industry, the analysis again takes a streamlined approach that does not require a fully detailed model of the economy (known as a structural general equilibrium model), but instead relies on an implementable formula that provides a good approximation of the excess burden that a regulatory action imposes on the markets for labor and capital (Goulder, Parry, and Williams 1999; Parry, Williams, and Goulder 1999; Goulder and Williams 2003; Dahlby 2008; CEA 2019b). For example, anticompetitive regulation reduces the demand for labor and capital in the regulated industry and thereby reduces the aggregate quantities of those production factors. Marginal excess burdens in labor and capital markets are translated into an additional increment to aggregate output by dividing them by our 48 percent estimate of the marginal tax wedge, which is broadly interpreted

⁴ Our analysis is not as detailed as the regulatory impact analyses that Federal agencies conduct to comply with Executive Order 12866 (OMB 2003). This chapter is independent of the rulemaking process. Instead, this chapter contributes to the CEA's mission, as established by Congress in the Employment Act of 1946, to offer objective economic advice based on economic research and empirical evidence. Our analysis is consistent with the economic principles that guide cost-benefit analysis, including our focus on the key concepts of willingness to pay and opportunity cost. Another report (CEA 2019b) provides an additional discussion of our approach; and still another report (CEA 2019a) provides a detailed discussion of the methods used to conduct prospective cost-benefit analyses of three of the deregulatory actions considered in this chapter. Our approach complements agencies' completed analyses and fills in gaps, for example, when a regulatory impact analysis was not able to quantify costs or benefits, or when a regulatory impact analysis was not required. Note that, consistent with standard practice, shifts of resources between industries are not counted as a cost or a benefit or a real income effect, except to the extent that market prices indicate that the industries put different values on those resources.

to include implicit taxes and imperfect competition.⁵ This formula captures general equilibrium interactions that would be left out of an analysis that only considered the impact of the regulatory action in the primary market. OMB's guidance on cost-benefit analysis of federal programs (Circular A-94) recommends analysis of the marginal excess tax burden. To date, however, for practical reasons the guidelines for regulatory cost accounting for the Executive Order 13771 regulatory budget have not required agencies to include the costs imposed on the private sector by excess tax burdens induced by regulatory actions. The analysis in this chapter demonstrates the feasibility and importance of a more complete accounting of regulatory costs, including marginal excess tax burdens.

The economic effects of regulation can be summarized in several ways. such as the costs to businesses, nationwide costs, nationwide benefits, or national incomes. The CEA employs three nationwide outcome concepts in this chapter: costs savings, net benefits, and real income. The distinction between the first two arises because a single regulation can create costs for one segment of the population while it creates a benefit for other segments. We refer to the aggregate of these as the "net cost" of the regulation, which (aside from sunk startup costs) is equal to the "net benefit" of overturning the regulation. We refer to the "cost savings" of overturning the regulation as the costs imposed on the segment of the population that was harmed by the regulation.⁶ Real income is similar to GDP, except that real income subtracts depreciation and reflects the effects of international terms of trade on the purchasing power of U.S. residents, which is an important result of one of the larger deregulatory actions. GDP and real income, which can differ from welfare or "utility," subtract the opportunity costs of the Nation's labor and capital as well as environmental and other nonpecuniary costs. As used in this chapter, all these concepts refer only to domestic benefits, costs, and incomes.

The primary subject of this chapter is the impact of regulation and deregulation on nationwide real income; we estimate that over time, the impact of regulatory reform will be worth \$3,100 per household each year. This chapter also estimates the net benefits of deregulatory actions. Some regulatory actions trade private goods for public goods, such as environmental quality. With public goods, and in other situations where private markets may fail, it is necessary to carefully consider the benefits and costs of regulatory actions. Even if the original regulatory action addressed a private market

⁵ An aggregate increase in a factor of production by 1 unit increases output by its marginal product (*MP*), but the entire output exceeds the net benefit (i.e., marginal excess burden) because the production factor has a marginal opportunity cost of supply. The net aggregate benefit of that 1 unit is 0.48**MP*, where 0.48 is the marginal tax wedge. The additional output is therefore the net aggregate benefit divided by 0.48.

⁶ The CEA's concept of cost savings is analogous to the revenue savings from eliminating a Federal program, whereas the net benefit would be the difference between revenue savings and the forgone benefits of the program's expenditures.

Box 3-1. Looking Forward and Backward to Study Regulatory Reform

Federal agencies conduct forward-looking, or prospective, cost-benefit analyses of proposed regulatory and deregulatory actions. In contrast, academic policy analysts typically conduct backward-looking, or retrospective, analyses of past public policies. For example, the definitive academic studies of the Airline Deregulation Act of 1978 were conducted in the 1980s and early 1990s (Winston 1993). The retrospective studies took advantage of data that reflected what actually happened in the deregulated airline market.

However, analysts conducting either prospective or retrospective studies face the challenging task of predicting market outcomes in a world that they cannot observe. Analysts in Federal agencies observe current market outcomes that, in many cases, reasonably approximate the "no action" baseline of "what the world will be like [in the future] if the proposed rule is not adopted" (OMB 2003, 2). But the agency analysts cannot look into the future and observe how the proposed rule would change market outcomes. In their prospective studies, the agency analysts use economic reasoning and empirical evidence to predict what an unobserved, counterfactual world would be like if the proposed rule were adopted. Academics who conduct retrospective analyses of past policies face the opposite challenge. They observe market outcomes in the real world, where the policy was implemented, but they cannot observe the counterfactual world without the policy. The academic policy analysts must also rely on economic reasoning and empirical evidence to predict outcomes in a counterfactual world.

Academic studies of airline deregulation illustrate the difficulty of doing an accurate retrospective analysis. Although the analysts observed airline market outcomes both before and after deregulation, they had to disentangle the effects of deregulation from other changes that affected the airline industry. In particular, airline deregulation in 1978 happened to coincide with an energy crisis that increased fuel prices and led to higher air fares and lower airline profits. Analysts took a counterfactual approach to isolate the effects of the energy crisis and to estimate the causal effects of deregulation—lower air fares and higher profits (Winston 1993).

When done well, prospective and retrospective analyses contribute valuable evidence about regulatory reform. Federal agencies, by necessity, must conduct prospective analysis of proposed actions. Likewise, in this chapter we mainly rely on prospective analysis in order to predict outcomes of the Trump Administration's regulatory reform agenda. Future academic research will undoubtedly conduct retrospective analysis and provide more evidence and new insights about the effects of the regulatory reforms that began in 2017. Research on the deregulations of the 1970s and 1980s provides reasons to be both optimistic and cautious about prospective analysis. When Winston compared predictions that deregulation would lead to lower prices to retrospective assessments, he described them as "surprisingly close,"

even though they were "often made more than a decade apart by different researchers" (Winston 1993, 1272). At the same time, he noted that the economics profession's predictions failed to quantify the value of reducing the inconvenience costs of airline travel restrictions and "grossly underestimated the benefits from deregulation" (Winston 1993, 1276).

failure, a deregulatory action is still warranted when the regulatory cost savings outweigh the forgone regulatory benefits. GDP and real income capture the value of private goods production, but these measures do not capture the value of public goods or other important nonpecuniary effects. However, when including nonpecuniary costs and benefits that are not part of real income, we estimate that the deregulatory actions have a net benefit of more than \$2,500 per household each year, compared with the previous trend of growing regulatory costs. This gain stems from the implementation of the regulatory reform agenda and from achieving a better balance between the cost of regulations and their societal benefits.

Because the preparation of this chapter occurred long enough after some of the regulatory or deregulatory actions to enable us to adequately measure relevant market outcomes, the CEA could also deviate from the regulatory impact analyses that accompany economically significant rulemaking by relying more heavily on retrospective analysis (see box 3-1).

Deregulatory Actions Considered

We sampled deregulatory actions for industry-specific analyses. When applicable, we also examined the corresponding regulatory action taken by the previous Administration. The actions were sampled from four broad categories. The first category consists of the statutes passed by Congress and signed by President Trump. The second category consists of the 16 Federal rules or guidance overturned under the Congressional Review Act (CRA) since January 2017. The third category consists of the rules in FY 2018 Regulatory Budget (i.e., the rules covered by Executive Order 13771 and finalized during that fiscal year, of which there are 261), as well as the rules in the FY 2019 Regulatory Budget

⁷ The concept of market failure plays a central role in cost-benefit analysis, but the existence of a market failure does not guarantee that the original regulatory action's benefits outweighed its costs. Market failure is a necessary but not sufficient condition for this conclusion. In practice, it is not clear that many of the 20 deregulatory actions we consider overturned regulations that addressed market failures.

⁸ In statistical terms, the categories are strata, and the overall population of interest consists of all economically important Federal regulatory actions taken since January 2017. Also see CEA (2019b, appendix I).

⁹ For each rule, Congress passed a resolution of disapproval that was signed by President Trump, thereby overturning the rule.

(OMB 2018). 10 The fourth category consists of agency guidance documents and rulemaking by independent agencies.

Because the purpose of this chapter is to estimate the aggregate economic effect of all new regulatory and deregulatory actions, as opposed to the effect of an "average" deregulatory action, we designed a sampling procedure to identify the likely largest actions in terms of economic impact. The average effect of the sampled actions is not necessarily a good estimate of the effect of the average unsampled action, but that is not our purpose. Rather, if the unsampled actions have an average effect that is in the same direction (but not necessarily magnitude) as the sampled actions, then the total effect of the sampled actions is a conservative estimate of the total effect of all the actions. Moreover, sampling the potentially larger effects yields a more accurate estimate of the total effect than sampling randomly. The omitted regulatory actions are those with few (most often, zero) comments from the public and little attention from Congress. These are the regulations where we have more confidence that the effects are comparatively small, so that excluding them from the total is less likely to have a large effect on our estimate of the total.¹¹

Our sampling procedure is not perfect. Some regulations attract attention from the public or Congress for various reasons unrelated to their regulatory costs. Our sample includes a few actions that we estimate have comparatively small aggregate effects, even though they received many comments from the public. At the same time, there might be regulatory actions that will have large aggregate effects but are excluded from our sample because they did not receive many public comments.

From the first category/stratum, we selected sections of two important new Federal laws enacted during the Trump Administration: the 2017 Tax Cuts and Jobs Act; and the 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act. From the second category, we selected three employment rules that affect a large number of workers as well as the top four economic regulatory actions, in terms of number of comments received from the public. From the third category, we selected the top six regulatory actions from FY 2018, in terms of the number of comments received from the public.

We selected four regulatory actions from the FY 2019 Regulatory Budget that we expected to be among the comment leaders. Three of these contribute to both our estimate of the cost savings from deregulation since 2017 and to

¹⁰ A number of the 16 rules disapproved under the CRA were part of the FY 2017 Regulatory Budget.

¹¹ To analogize, suppose that you wanted to measure the number of automobiles in a house. It would be unnecessarily inaccurate to take a random sample of rooms, because most of the time the garage would not be sampled and therefore most of the time the conclusion would be zero automobiles. Looking exclusively in the garage is the obviously superior alternative to a random sample. That is what the CEA has done with regulations: we looked exclusively at those with a significant chance of having a large economic effect. The formal statistical proof of this conclusion is provided above.

our estimate of the costs of the growing regulatory state before that.¹² A fourth regulatory area with heavy commenting, and potentially large costs imposed by the previous Administration, relates to emission and fuel economy standards for automobiles. To be conservative, we do not include any cost savings from deregulatory actions in this area.¹³

Finally, our sample of regulatory actions includes important guidance at the Food and Drug Administration (FDA) regarding the approval of generic drugs, as well as a rule from the Federal Communications Commission (FCC) that received millions of comments from the public. All the comment leaders for FY 2017 and FY 2018 were deregulations rather than regulations, and most of them have had an economically significant nationwide impact. And though we have not measured the economic impact of hundreds of other FY 2017 and FY 2018 Federal rules, the aggregate cost savings for the other rules reported in the *Federal Register* are in the direction of additional cost savings.

Table 3-1 lists the regulations and our estimates, with 2 of the 18 rows ("Savings arrangements" and "Joint Employer") each showing the combined effect of a pair of deregulatory actions, so the table represents a total of 20 deregulatory actions. ¹⁶

Although numbers of pages of regulations are not part of our quantitative analysis, it is interesting to note that the regulatory actions and their deregulatory companions in our sample were promulgated with more than 6,000 pages of Federal statutes, the *Federal Register*, or separate agency impact analyses.

¹² These are the Joint-Employer proposed rule (RIN 3142-AA13) from the National Labor Relations Board (NLRB), and the Joint Employer proposed rule (RIN 1235-AA26) from the Department of Labor (DOL). Because our analysis does not separate the effects of the DOL guidance and the NLRB proposed rule on joint employers, technically we have also selected the NLRB rule, even though it is not part of any year's Regulatory Budget. The Fiduciary Rule (RIN 1210-AB82) is in the FY 2019 budget, but its temporary predecessor rule (82 *FR* 31278) also appears in the FY 2018 Regulatory Budget, with many comments.

¹³ The Trump Administration has not yet finalized a rule establishing fuel economy or emissions standards for automobiles. The CEA plans to estimate its economic effects after such a rule is finalized.

 $^{^{14}}$ The top 10 commented rules from each of the FY 2017 and FY 2018 budgets were all deregulatory actions. Most rules in the Regulatory Budget receive no comments.

¹⁵ Some analysts have concluded that many regulatory impact analyses reported in the *Federal Register* omit important resource and opportunity costs of regulation (Harrington, Morgenstern, and Nelson 2000; Belfield, Bowden, and Rodriguez 2018), which holds on average in our sample. An example is the 2016 rule restricting short-term, limited duration health insurance while asserting that "this regulatory action is not likely to have economic impacts of \$100 million or more in any one year" (81 *FR* 75322), whereas the CEA (2019a) found the annual costs to exceed \$10 billion (100 times the upper bound cited by the rule). This suggests that estimates of the costs savings from deregulation based on the *Federal Register* would be understated, although not necessarily relative to the cost additions of regulations.

¹⁶ As is explained in more detail below, the pre-2017 regulatory actions that made table 3-1's deregulatory actions necessary are used to estimate the economic effects of a regulatory freeze.

Table 3-1. Regulatory and Statutory Actions' Annual Impact on Real Income Relative to a Regulatory Freeze, by Sampling Strata

Sampling Strata	Name/Description	Impact on Real Income (in \$ Billions per Year)
CRA Nullification: Economic Regulation with High Comment Volume	Protecting the Privacy of Customers of Broadband and Other Telecommunications Services (Opt-In)	\$22
	Disclosure of Payments by Resource Extraction Issuers	\$3
	Stream Protection Rule	\$2
	Arbitration Agreements	\$1
CRA Nullification: Broad Employment Regulation	Savings Arrangements Established by States for Non-Governmental Employees & Qualified State Political Subdivisions for Non-Governmental Employees	\$13
	Federal Acquisition Regulation; Fair Pay and Safe Workplaces	\$0
FY 2018 or FY 2019 Regulatory Budget: Economic Regulation with High Comment Volume	DOL Guidance/Rule and NLRB Rule regarding the Standard for Determining Joint-Employer Status	\$17ª
	Definition of "Employer" Under Section 3(5) of ERISA-Association Health Plans (AHP Rule)	\$17 ^b
	Rescission of Rule Interpreting "Advice" Exemption in Section 203(c) of the LMRDA* (Persuader Rule)	\$15
	Short-Term, Limited-Duration Insurance* (STLDI)	\$13
	Payday, Vehicle Title, and Certain High- Cost Installment Loans	\$7
	18-Month Extension of Transition Period and Delay of Applicability Dates* (Fiduciary Rule)	\$5
	Scope of Sections 202(a) and (b) of Packers and Stockyards Act	\$0
	Waste Prevention, Production Subject to Royalties, and Resource Conservation; Rescission or Revision*	\$0
Independent Agency and Guidance	Repeal of Protecting and Promoting the Open Internet and Issuance of Restoring Internet Freedom	\$54
Documents	FDA and HHS Modernization Efforts	\$32
Notable Statutes	The Tax Cuts and Jobs Act- Reduced the Individual Mandate Penalty to Zero	\$28
	Economic Growth, Regulatory Relief, and Consumer Protection Act	\$6
Sum = total impact relative to a regulatory freeze		\$235
Total impact relative to 2001–16 regulatory trend		\$377

Sources: Office of Information and Regulatory Affairs; Government Accountability Office; eRulemaking Program Management Office; Library of Congress; CEA calculations.

Note: FDA = Food and Drug Administration; HHS = Department of Health and Human Services. An asterisk (*) signifies the use of a shortened name for the regulation. All annual effects on real income are rounded to the nearest billion. The estimate for joint employer rules includes anticompetitive effects of other DOL and NLRB regulations.

a. The estimate for joint employer rules includes anticompetitive effects of other DOL and NLRB regulations.

b. The calculation for AHPs assumes that the expansions of the definition of an employer for AHPs will be found lawful when adjudication is complete.

Consumer Savings on Internet Access

Deregulation frequently reduces consumer prices by enhancing competition and productivity. To show how this happens, we begin our analysis of specific Federal rules with two examples from the broadband or Internet service provider (ISP) industry, which includes wireless smartphone service as well as home Internet service over cables, telephone lines, fiber-optics, and satellites.

Before 2016, ISPs were permitted to, and often did, use and share customer personal data, such as Internet browsing history, unless the consumer "opted out" of data sharing. With so many consumers staying with the default sharing option, ISPs could earn revenue both from subscriber fees, which are tracked by the industry's consumer price index (CPI), and from using or sharing customer data. Equivalently, the receipt of customer data allowed ISPs to earn the same profits with a lower subscriber fee. In effect, consumers paid for their subscription part with money and part by providing personal data.

In 2016 the FCC proposed and finalized a broadband privacy rule requiring ISPs to have consumers to pay by default with only money, thus prohibiting the opt-out system and instead requiring the opt-in system. This rule, which was likely anticipated well before 2016 as the FCC was moving ISPs under the stricter "Title II" regulation (see below), was to go into effect on January 3, 2017. However, in 2017, Congress passed and President Trump signed a resolution of disapproval under the Congressional Review Act to overturn the 2016 FCC rule and prevent future Administrations from adopting similar rules. This 2017 deregulatory action assured market participants that the ISP market would proceed with low subscriber fees. By overturning the 2016 rule, the 2017 action restored the FCC's pre-2016 regulatory approach to protecting customer privacy. Consumers with privacy concerns may opt out and request that their ISP not share their data.¹⁷

Overturning the FCC's opt-in rule resulted in lower prices for wired and wireless Internet service, as shown by the CPIs graphed in figure 3-4. Wireless service prices fell at the same time that Congress was considering the resolution of disapproval, and wired Internet prices fell a couple of months later. Both these declines are about \$40 per subscriber over the life of the subscription, which is similar to independent estimates of the per-subscriber cost of

¹⁷ In 2013, AT&T introduced its Internet Preferences Program, which gave consumers the choice to opt out of data sharing. If consumers opted in and allowed data sharing, they received the lowest available subscription rate, which was at least \$29 per month lower. Media reports suggest that the vast majority of consumers opted in; i.e., they were willing to allow data sharing in order to qualify for the lower subscription rate.

Figure 3-4. Wireless and Wired Internet Service Provider Price Cuts Close to Congressional Review Act Nullification of Federal **Communications Commission Rule, 2016–17**



Sources: Bureau of Labor Statistics; CEA calculations.

Note: CRA = Congressional Review Act; FCC = Federal Communications Commission.

obtaining personal data consent from retail customers that are the basis for our quantitative analysis. 18

At the aggregate level, we estimate the effect of overturning the opt-in rule to be a net savings (including a subtraction for the cost to consumers of providing personal data and an addition for producer surplus) of about \$11 billion per year. 19 Overturning the rule also encourages the aggregate supplies of capital and labor (CEA 2019b), as well as competition in online advertising and other markets where consumer data are valuable. We estimate that these effects would create additional net benefits of \$5 billion per year and

¹⁸ Staten and Cate (2003) report results from a credit card issuer that tried an opt-in program for personal customer information, and found that it cost an average of about \$37 (converted to 2018 prices) per customer in terms of mailings and phone calls to obtain opt-in from their customers. Amortized over a 24-month wireless contract and over a wired Internet contract lasting 60 months-i.e., about 4.0 percent and 1.0 percent of the retail price, respectively. Assuming that costs are passed through retail price according to the 60 percent markup rate measured by Goolsbee (2006) for the broadband industry, we predict retail price effects of 6.5 percent and 1.6 percent, respectively. The actual price drops shown in figure 3-4 are 7.0 percent and 1.6 percent, respectively.

¹⁹ We estimate that broadband industry revenue (wired and wireless combined) would be \$202 billion per year under the FCC rule. We estimate that the consumers providing personal data as a result of the overturning of the FCC rule do so at an aggregate annual cost of \$1.5 billion, offsetting an aggregate annual savings in subscription fees of \$11 billion as well as an addition to producer surplus.

corresponding additional real income of about \$11 billion per year, which is small compared with total activity in those other markets but significant compared with the regulated market.²⁰ After 5 to 10 years when these effects are fully realized, the total impact on real incomes is estimated to be \$22 billion (see table 3-1).

Before the Trump Administration, another FCC rule adopted in 2015 restricted the vertical pricing arrangements of ISPs—that is, monetary transactions between ISPs and the providers of Internet content such as Netflix and Yahoo. ²¹ The 2015 rule also imposed government oversight on communication services, making it difficult for these companies to quickly respond to competition and provide new goods and services on the market. These vertical pricing and other restrictions are being removed by the FCC through its "Restoring Internet Freedom" order, returning to regulating ISPs under Title I of the Communications Act.

Previous research shows that vertical pricing restrictions in broadband significantly reduce the quantity and quality of services received by broadband consumers. ²² Hazlett and Caliskan (2008), for example, looked at "open access" restrictions that were applied to U.S. Digital Subscriber Line service (DSL) but not Cable Modem (CM) access. They found that three years after restrictions on DSL services were relaxed, in 2003 and 2005, U.S. DSL subscriptions grew by about 31 percent relative to the trend, while U.S. CM subscriptions increased slightly relative to the trend. Average revenue per DSL subscriber fell, while average revenue per CM subscriber was constant (although quality increased). At the same time, DSL and CM subscriptions in Canada, which was not experiencing the regulatory changes, did not increase relative to the trend. Applying these findings to ISPs in the years 2017–27, we find that, by removing vertical pricing regulations, the Trump Administration's "Restoring Internet Freedom"

²⁰ See also Goulder and Williams (2003) and Dahlby (2008). Throughout this chapter, as in our other reports (CEA 2019a, 2019b), we use a 0.5 marginal cost of public funds to approximate the extraindustry net costs of an industry's regulation, except when we estimate those costs to be primarily outside the United States (see especially figure 3-4 and the associated discussion).

²¹ Both the vertical pricing restrictions and the opt-in requirement are linked to the alternative regulatory frameworks that the FCC has variously proposed for ISPs—Title I versus Title II of the Communications Act. However, vertical pricing restrictions and the opt-in requirement are economically distinct and were also implemented by separate rulemaking (see, respectively, 81 *FR* 8067 and 81 *FR* 87274).

²² See also Becker, Carlton, and Sider (2010, 499), who conclude that regulating vertical pricing in broadband "interfere[s] with the development of business models and network management practices that may be efficient responses to the large, ongoing, and unpredictable changes in Internet demand and technology, . . .[which] is likely to harm investment, innovation, and consumer welfare." Flexible contracting between customer and supplier is generally expected to increase productivity because of the complementary relationship between the two, in contrast to contracts between two suppliers of the same good that have the potential to increase market power.

order will increase real incomes by more than \$50 billion per year and consumer welfare by almost \$40 billion per year.

Consumer and Small Business Savings on Healthcare

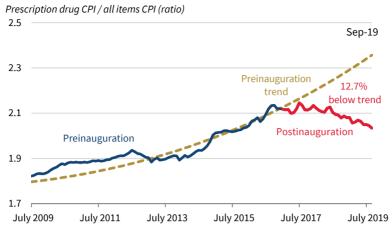
Deregulation is also reducing prices for healthcare. Figure 3-5 shows an inflation-adjusted index of retail prescription drug prices compared with its previous trend growth. Prescription drug prices outpaced general inflation for decades; but in the past two years, they have fallen more than 11 percent below the previous trend as of May 2019, and below general inflation. In 2018, prescription drug prices even declined in nominal terms over the calendar year for the first time since 1972. Much of this is the result of the Trump Administration's efforts at the FDA, such as its 2017 Drug Competition Action Plan and 2018 Strategic Policy Roadmap, to enhance choice and price competition in the biopharmaceutical markets. Under these policies, the FDA has approved a record number of generic and new brand name drugs to compete against existing drugs (CEA 2018b).²³ We estimate that the results of these actions will save consumers almost 10 percent on retail prescription drugs, which results in an increase of \$32 billion per year in the purchasing power of the incomes of Americans (including both consumers and producers).²⁴

The Trump Administration has also taken deregulatory actions in other healthcare markets, such as insurance. Previous CEA reports provided analyses of four healthcare deregulatory actions: the process improvements at the FDA reflected in figure 3-5, and three actions deregulating health insurance for individuals and small groups (CEA 2019a, 2019b).²⁵ These four actions, which remove restrictions and alleviate some of the costs of Federal policies introduced during the years 2010–16, are by themselves expected to increase average real incomes by about 0.5 percent, or an average of about \$700 per

²³ Another indicator of the quantitative importance of new FDA procedures is the July 2017 crash of the stock price of at least one foreign generic drug maker, which analysts attributed to "greater competition as a result of an increase in generic drug approvals by the U.S. FDA." See Sheetz (2017). ²⁴ The 10 percent assumes that 1 standard deviation below the pre-2017 trend is due to factors other than deregulation. Retail prescription drug expenditures of \$326 billion per year were measured by Roehrig (2018). Note that prices may have fallen even more than shown in figure 3-5, because in 2016 the Bureau of Labor Statistics changed its formula from geometric to Laspeyres, which increases the measured rate of inflation (CEA 2018b).

²⁵ The three health insurance actions are (1) reducing, through the Tax Cuts and Jobs Act of 2017, the individual mandate penalty to zero owed by consumers who did not have federally approved coverage or an exemption; (2) permitting, via a June 2018 rule, more small businesses to form Association Health Plans (AHPs) to provide lower-cost group health insurance to their employees; and (3) expanding, through an August 2018 rule, short-term, limited-duration insurance plans.

Figure 3-5. Inflation-Adjusted CPI for Prescription Drugs, 2009-19



Sources: Bureau of Labor Statistics: CEA calculations.

Note: The Consumer Price Index (CPI) covers retail transactions, which are about three-fourths of all prescription drug sales. Inflation adjustments are calculated using the ratio of the CPI of prescription drugs relative to the CPI-U for all items. The preinauguration expansion trend in annual growth rates is estimated over a sample period July 2009–December 2016, with 2017–19 projected levels then reconstructed from projected growth rates.

household each year.²⁶ Among those who benefit from these deregulatory actions are an estimated 1 million consumers who will save on their individual health insurance policy premiums by switching to less-regulated short-term plans, with savings that may exceed 50 percent.²⁷ Also included are small businesses, which may see substantial premium savings from obtaining access to cheaper large-group health insurance coverage.

Employment Regulations

Unlike large companies, small businesses do not typically have a team of in-house lawyers and regulatory compliance staff, making understanding

²⁶ This average includes zeros for households not affected by the four deregulatory actions. For the purposes of calculating real income effects, we do not count parts of the net benefit that are consumer hassle costs because those costs are traditionally excluded from GDP, even though they are genuine costs from a consumer's point of view. Similarly, we treat the revealed preference value of public health insurance as part of "net benefits" but not GDP or real income, which traditionally are assigned those values according to cost rather than revealed preference value. As a result, the GDP effect of the health insurance deregulations is less than the net benefit, while the opposite tends to occur for other deregulations.

²⁷ Part of the premium savings comes from the fact that the short-term plans restricted by the Obama Administration have different characteristics than the individual plans regulated by the Affordable Care Act. The CEA's (2019a) analysis shows how the Trump Administration's deregulatory actions reduced health insurance prices significantly, even after adjusting for differences in plan characteristics. See also our report (CEA 2019a) for sources on short-term plan premiums.

and complying with regulations particularly onerous. Of the small businesses surveyed monthly by the National Federation of Independent Business (NFIB) between 2012 and the election of President Trump, a plurality of surveyed businesses selected "government requirements and red tape"—that is, regulations—as their single most important problem 45 percent of the time they were asked. Though a plurality of small businesses have never selected regulations as their single most important problem since President Trump's election, regulations remain an important issue.

During President Trump's Administration, the Department of Labor (DOL) and National Labor Relations Board (NLRB) have been working to eliminate a number of regulations that disproportionately burden small businesses, reduce worker productivity and real wages, and distort competition in the labor market. The NLRB, under the Obama Administration, expanded the definitions of both joint employer and independent contractor, which, among other things, would have categorized some franchisers as joint employers of their franchisee employees. DOL had also changed its guidance under certain statutes regarding joint employers and independent contractors.

Without the Trump Administration's proposed deregulatory actions, thousands of small businesses, including franchisees and subcontractors, would no longer be able to compete against larger corporations, and millions of workers' wages would have fallen due to the effect of these labor regulations. The CEA (2019b) estimates that, together, the Obama Administration's DOL guidance and the NLRB standard related to joint employers would have created more than \$5 billion in annual net costs and reduced real incomes by about \$11 billion.

Federal rulemaking also plays a role in maintaining a level playing field for small businesses that are subject to State regulations. In 2015, DOL determined that Federal rulemaking was likely required in order to permit States to mandate private employers to administer payroll deductions, with proceeds to be invested in State-managed individual retirement accounts (IRAs), and automatically enroll their employees in those accounts. In the revealed preference framework, the fact that a number of small businesses did not voluntarily offer these plans strongly suggests that the costs of administering these plans exceeded the value they create for employees.²⁸ Nevertheless, a number of States are requiring all employers to automatically enroll employees, and legislation is pending before other State legislatures to require the same.²⁹ If employers are forced to comply, the administrative costs, or the penalty for noncompliance, reduce what can be paid out in employee compensa-

²⁸ Between 39 million and 72 million people work for an employer that does not offer a retirement plan (AARP 2014; Panis and Brien 2015; and the final rule). Following the standard approach in labor economics (Lazear 1979, 1981; Mortensen 2010), we assume that the composition of employee compensation maximizes the joint surplus of employer and employee.

²⁹ See State of Oregon (2015).

tion, which is why Congress and President Trump overturned previous DOL rulemaking designed to facilitate the State-level employer mandates.

The CEA uses the same economic framework for analyzing the IRA mandate that it used for health insurance mandates (CEA 2019a).³⁰ We assume that Federal rulemaking is relevant and will be affecting 10 million workers with an average annual IRA contribution of \$1,571 per year.³¹ We estimate that each \$1,571 deposited in an IRA is, in present value terms, a transfer from the Federal Treasury to the worker of \$526. Because employers need to be forced to provide the accounts, we infer that there is some combination of marginal employer and employee costs of providing a retirement plan that equals or exceeds \$526 per worker each year. Conversely, this cost is bounded above by \$526, plus the annual per-worker fine for noncompliance, which we take to be \$250 per employee each year.³² Following Harberger (1964), this makes the aggregate of the employer and employee costs \$6.5 billion per year.³³ Adding in the deadweight cost of taxes, that is a net cost of \$10 billion per year, most of which is borne outside the State implementing the program. As a real income loss (i.e., ignoring factor-supply costs in the net cost calculation), it is \$13 billion per year.

In 2011, DOL proposed costly "Persuader Rule" amendments to the Labor-Management Reporting and Disclosure Act that would potentially have generated reporting requirements for consultants (including attorneys) when the employer posed labor law questions, even if the attorney or consultant did not communicate directly with employees.³⁴ These amendments were

³⁰ One difference is that the IRA mandates allow individuals to opt out without penalty. Our analysis assumes that some, but not all, workers affected by the rule will opt out. Research has found that automatic enrollment in retirement plans generates substantial inertia, so workers remain in plans that they would not have voluntarily chosen (Madrian and Shea 2001; Bernheim, Fradkin, and Popov 2015).

³¹ "Since 2012, 40 States have studied proposals for State-facilitated savings programs or considered or adopted legislation to create them. At least 10 States enacted legislation to expand access to retirement savings for nongovernmental workers. California, Connecticut, Illinois, Maryland, and Oregon have all adopted auto IRA models" (NCSL 2018). As to the average contribution, the CEA notes that the Illinois pilot had 196 employees investing an average of \$392.86 per employee per quarter (about \$1,571 a year) (Hayden 2018).

³² The Illinois fine is \$250 per employee a year (Hopkins 2015). California has a \$250 penalty 90 days after receiving a noncompliance notice and a \$500 penalty after 180 days (UC Berkeley Labor Center 2017). It is unclear whether and how often the State will send notices. It does not appear that Oregon has yet established its penalty.

³³ It is often the case in cost-benefit analysis that a reduction in subsidy payments is merely a transfer that leaves social benefits unchanged; the benefits to taxpayers are exactly offset by the costs to the recipients who lose the subsidy. The tax subsidy to IRA deposits is properly treated as a transfer when the task is evaluating the effects of the subsidy—i.e., when comparing current policy with a hypothetical policy that has no tax subsidy for IRAs. But the purpose of this chapter is to evaluate the effect of relaxing restrictions on choices by employers and employees, not changing the tax subsidy rules for IRAs. See also CEA (2019a).

³⁴ Cummings (2016) and 81 FR 15924.

finalized and set to take effect in 2016, but were delayed due to ongoing litigation.³⁵ The Persuader Rule amendments were rescinded by DOL in 2018.³⁶

Under the Persuader Rule, consultants (including attorneys) would have needed to file with DOL a Form LM-20, which becomes publicly available, reporting the amount of their fee and the type of advice provided.³⁷ As another example, persons attending an invited talk at their local Chamber of Commerce related to employment law would have had their names "likely disclosed to DOL and made [publicly] available." In order to comply with the Persuader Rule, a practitioner of labor law might have had to "identify and segregate every increment of time billed to each of [their] clients for 'labor relations advice or services' even if the firm was not doing any 'persuader' consulting under the New Rule for that client currently." The American Bar Association understood the Persuader Rule to require labor lawyers to violate their ethical duties to their clients (Brown 2016, 8-10), while some labor law firms refused to take on any work that would fall under the Persuader Rule's new reporting requirements.38

Due to the large number of employers subject to the rule, the midpoint of Furchtgott-Roth's (2016) estimates shows the rule to have ongoing compliance costs of \$5.4 billion per year combined for employers, attorneys, and consultants. Initial costs of the rule were estimated as \$3.6 billion. The CEA determined that 1 of the 18 components of the estimates may be overstated, and therefore we adjusted the ongoing costs downward to \$4.9 billion per year in 2018 prices. The compliance costs come out of productivity and thereby have additional net annual costs of \$2.4 billion, as they reduce aggregate supplies of capital and labor.

These and other rules introduced by DOL and the NLRB during the Obama Administration had anticompetitive effects on the labor market.³⁹ We do not attempt to parse the combined effects among the various rules and guidance, but instead allocate it entirely to the rules regarding joint employers, and we then avoid double-counting by omitting any competition costs of other NLRB and/or DOL regulations. The combination of regulations cited in this section would have reduced real incomes by about \$45 billion per year, or an average of almost \$400 per household each year.

³⁵ See NFIB v. Perez (2016). Also see Eilperin (2017).

³⁶ See DOL (2017).

³⁷ This paragraph quotes or paraphrases Cummings (2016).

³⁸ See page 79 of the June 20, 2016, testimony in NFIB v. Perez (Federal case number 5:16-cv-66).

³⁹ See the CEA's (2019b) analysis (as well as 81 FR 15929) of how a broader definition of "joint employer" would reduce competition among employers in some industries.

Financial Regulations

In the wake of the 2007–9 global financial crisis, banking reforms attempted to address the systemic risk created by large financial institutions. Congress and regulators raised banks' capital standards, imposed new stress tests, and bestowed new regulatory powers on bank regulators. Though these reforms were intended to reduce the risks created by large financial institutions, the Dodd-Frank Act's regulations imposed costly new regulatory requirements on small and mid-sized banks that did not pose a systemic risk.

Ultimately, Dodd-Frank's overly broad regulations hurt lending to small businesses by unnecessarily burdening community and regional banks, which play an outsized role in supporting small businesses and local economies across the Nation. Per the Federal Deposit Insurance Corporation's definition, community banks make up 92 percent of federally insured banks and thrifts, and they are responsible for 16 percent of total loans and leases. Community banks also hold 42 percent of small loans to farms and businesses. Also, in 2014 there were 646 United States counties in which the only banking offices belonged to community banks, and another 598 counties where community banks held at least 75 percent of deposits. Together, these counties made up almost 40 percent of all U.S. counties.

The 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act, also known as the "Crapo Bill," signed by President Trump, removes the restrictions from smaller banks that were misapplied to them as part of earlier efforts to alleviate the "too big to fail" banking problem. The CEA (2019b) posits that this act "recognizes the vital importance of small and midsized banks, as well as the high costs and negligible benefits of subjecting them to regulatory requirements better suited for the largest financial institutions. [It] is expected to reduce regulatory burdens and help to expand the credit made available to small businesses that are the lifeblood of local communities across the nation."

Heightened consolidation among small banks (those with assets less than \$1 billion) followed the enactment of Dodd-Frank, with the number of institutions declining by more than 2,000 (–31.0 percent) since 2011. Bank consolidation is not inherently uncompetitive, but consolidation that is driven by regulations reflects the distortionary burden of regulatory costs. After Dodd-Frank, the total loans by small banks has declined from \$889 billion to \$815 billion (–8.3 percent) since 2011. If these small banks had instead grown their loan portfolios by 1.55 percent—the average of the past three expansions—during this period, there would have been about 20 percent more small bank loans now than there actually are. These missing loans are associated with about \$6.3 billion in additional annual value added in small banking, which we

estimate to produce about \$3 billion in annual surplus for lenders and borrowers. 40 Including effects on the entire economy due to additional employment and investment, the Crapo Bill has annual net benefits of almost \$5 billion and raises real annual incomes by about \$6 billion by removing regulatory burdens from small bank lenders.

The CEA has also conducted industry-specific analyses of the effects of several other regulations that were introduced during the years 2010-16 and have been removed (or are in the process of being removed) during the Trump Administration. One of these was the attempt by the Consumer Financial Protection Bureau (CFPB) to largely eliminate the small dollar lending industry, which had revenues of about \$7 billion per year in 2015 (82 FR 54479). Small dollar lending is a valuable service that provides consumers with important resources and flexibility to better manage their finances. The CFPB's analysis acknowledged that consumers found the loans helpful for paying "rent, childcare, food, vacation, school supplies, car payments, power/utility bills, cell phone bills, credit card bills, groceries, medical bills, insurance premiums, student educational costs, daily living costs," and other pressing expenses (82 FR 54515). The CFPB predicted that its rule would reduce activity in the small dollar lending industry by 91 percent. The lost flexibility to use small dollar lending to help pay for pressing expenses is indicative of the opportunity costs of sharply contracting the industry. Using revealed preference methods, the CEA estimates a corresponding loss of consumer and producer surplus of \$3 billion, and a reduction of real incomes by about \$7 billion.⁴¹

Additional Regulations

Among our sample of 20 rules, we find that 6 have comparatively small aggregate effects: DOL's Fiduciary Rule, the Security and Exchange Commission's Disclosure of Foreign Payments by Resource Extraction Issuers, the Department of the Interior's Stream Protection Rule, the CFPB's prohibition of arbitration agreements in financial contracts, the Waste Prevention Rule, and a U.S. Department of Agriculture (USDA) rule implementing the Packers and

⁴⁰ Our estimate of lender surplus uses the Lerner-index estimates from Koetter, Kolari, and Spierdijk (2012) and assumes a unit price-elasticity of loan demand with respect to net interest margin.

⁴¹ Assuming that the industry demand for small dollar lending is linear in the fees charged and has a point elasticity of -1, the lost consumer surplus alone is \$2.7 billion. The lost consumer surplus is even more if the demand for small dollar lending has a constant elasticity, even if this elasticity were as far from zero, as is the firm-level elasticity of -4.28 estimated by McDevitt and Sojourner (2016).

Stockyards Act. 42 We estimated that eliminating these 6 rules, as the Trump Administration has done, increases real incomes by about 0.06 percent in total, which is about \$11 billion per year. A 7th rule that has also been eliminated, the Fair Pay and Safe Workplaces Rule, may technically have zero effect on GDP and real incomes because it raises the costs of Federal contractors whose contribution to GDP is by definition its costs. 43 Although the effects of these 7 rules are likely large compared with many of the rules not in our sample, \$11 billion per year is a small fraction of the combined effects of the other 13 rules in our sample.

We have not measured the economic impact of hundreds of FY 2017 and FY 2018 Federal rules, including a few regulations. However, the aggregate cost savings reported for the other rules as recorded in the *Federal Register* are in the direction of additional cost savings, suggesting that the cost savings from our sample of 20 deregulatory actions may be a conservative estimate of the cost savings from all regulatory and deregulatory actions since January 2017.

The Doubling Effect of Shifting from a Growing Regulatory State to a Deregulatory One

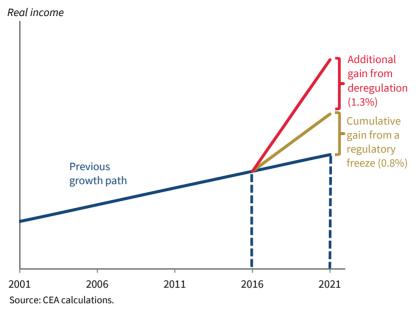
Before 2017, the Federal regulatory norm was the perennial addition of new regulations. As shown above, in figure 3-1, between 2000 and 2016, the Federal government added an average of 53 economically significant regulations each year. During the Trump Administration, the average has been only 10 (not counting deregulatory actions or transfer rules).

Even if no old regulations were removed, freezing costly regulation would allow real incomes to grow more than they did in the past, when regulations were perennially added (shown by the dark blue line in figure 3-6), as with the

⁴² The Fiduciary Rule added to the costs of saving for retirement by further expanding the circumstances under which a financial adviser is considered to be fiduciary. DOL estimated at the time the rule was published in 2016 that it would benefit investors on net. The rule was vacated in toto by the Fifth Circuit Court of Appeals in *Chamber of Commerce v. Department of Labor*, 885 F.3d 360 (5th Cir. 2018). The Disclosure of Foreign Payments by Resource Extraction Issuers Rule raised costs for U.S. extraction companies. "Hydrological balance" provisions of the Stream Protection Rule would shut down much of the U.S. longwall mining industry (*Murray Energy Corporation v. U.S. Department of the Interior*, 2016). The CFPB "prohibit[ed] consumers and providers of financial products and services from agreeing to resolve future disputes through arbitration rather than class-action litigation," which would have raised the prices of consumer financial products (U.S. Department of the Treasury 2017). The Waste Prevention Rule added additional restrictions on "oil and gas drilling and extraction operations on Federal and tribal lands" (CEA 2019b, 287). The USDA rule interfered with vertical contracts in the production of poultry and pork, raising costs throughout the supply chains (8th circuit 2018).

⁴³ In contrast, raising the costs of private enterprises typically does reduce GDP and real incomes because their contribution to GDP depends on the value those enterprises create for their customers, as measured by what customers pay. The CEA notes that the production of some of the Federal contractors may be measured like those of private enterprises, in which case zero is a conservative estimate of the real income effect of overturning the rule.

Figure 3-6. Deregulation Creates More Growth Than a Regulatory Freeze, 2001-21



yellow line in figure 3-6. The amount of extra income from a regulatory freeze depends on (1) the length of time that the freeze lasts and (2) the average annual cost of the new regulations that would have been added along the previous growth path. For the sake of illustration, figure 3-6 shows a freeze through 2021. We also have a conservative estimate of the average annual cost of regulatory additions during the years 2010–16, namely, the cost of 20 of the rules created during those years and identified in our sampling. At 1.3 percent of real income spread over those 7 years, that is an annual cost addition of about 0.19 percent a year (i.e., about \$1,900 per household after 7 years). Those years are somewhat unusual in terms of numbers of new economically significant regulations, so we take the previous trend (for 2001–16) to be 0.16 percent a year. In other words, by the fifth year of a regulatory freeze, real incomes would be 0.8 percent (about \$1,200 per household in the fifth year) above the previous growth path.

As well as restraining the addition of new regulations, the Trump Administration has removed previous ones. As shown by the red line in figure 3-6, removing costly regulations allows for even more growth than freezing them. As explained above, the effect, relative to a regulatory freeze, of removing 20 costly Federal regulations has been to increase real incomes by 1.3 percent. In total, this is 2.1 percent more income—about \$3,100 per household

Box 3-2. How Old Are Midnight Regulations?

A number of the regulations reversed by the Trump Administration have been called "midnight regulations," which are final rules published between Election Day and the inauguration of a new President. (Thus, midnight regulations refer to regulations finalized at the end of a Presidential term and before the change to a President of the other political party.)

A new President can reverse the midnight regulations by using the standard rulemaking process to refuse to defend the regulations in court, or by (together with Congress) overturning them with procedures established by the 1996 Congressional Review Act (CRA). In theory, the publishing of a costly midnight regulation, along with its reversal soon afterward, could have little or no effect on industry or the wider economy if market participants recognize that the midnight rules would not last long enough to constrain economic activity. (If market participants anticipate use of the Congressional Review Act, a costly midnight regulation could have the opposite effect, because the CRA would prohibit all future administrations from promulgating the same or a similar rule imposing those costs, until a future Congress expressly approved that type of regulation.) However, the most costly of the 2016 midnight regulations cannot be characterized this way because (1) they had been in the rulemaking process for years before the 2017 inauguration, (2) most of the 2016 polls and media predicted a different election outcome, and (3) the CRA had been used only once before 2017.

Sixteen Obama-era regulations were ultimately nullified by the CRA. The more economically important of these are the Federal rule allowing States to mandate employers to provide retirement accounts (the "IRAmandate rule"), the FCC rule regarding broadband privacy, and the Securities and Exchange Commission's rule requiring public disclosure of foreign payments (RIN 1210-AB71; see also 1210-AB76, document FCC-2016-0376-0001, and RIN 3235-AL53, respectively). They date back as far as 2010 but became eligible for CRA nullification in the 115th Congress because challenges from courts and the public extended the rulemaking process until late 2016, or later. (See also Public Citizen 2016, which found that midnight regulations "of Presidents Bill Clinton and George W. Bush took longer [3.6 years], and underwent more days of OIRA review than the average rule over the past 17 years.") The IRA-mandate rule dates back to at least 2015. The proposed FCC privacy rule was released April 1, 2016, although arguably it was anticipated by the FCC's actions on "net neutrality" dating back to 2010.

The CEA therefore sees the Obama-era economic regulations as part of a normal rulemaking process rather than an economically irrelevant signaling of a political platform. Although final rules follow their notices of proposed rulemakings with a time lag, and a new Administration may decline to finalize notices of proposed rulemaking from a previous Administration, the length of the time lag should not affect estimation of the medium- to long-term economic effects of deregulation or of a regulatory freeze. The length of the time lag does affect the timing of the economic effects.

each year—relative to the previous growth path.44 (Also see box 3-2 on socalled midnight regulations.)

Regulations Before 2017 with Disproportionate Costs

The analysis thus far has primarily considered the effects of regulation on income, but regulation—or the lack of it—can affect well-being in nonpecuniary ways not captured by income. However, even when including nonpecuniary costs and benefits, we estimate that deregulatory actions have a net benefit of more than \$2,500 per household each year, compared with the previous trend of growing regulatory costs. The gain stems from the fact that the new level of regulation strikes a better balance between the costs of regulations and their societal benefits, where benefits include things valued by people but not necessarily bought or sold in the marketplace (and that thus are not included in the National Income and Product Accounts or in the usual income measures). The Trump Administration requires Federal agencies to conduct cost-benefit analyses of significant regulatory actions, including deregulatory actions, and that they only be issued "upon a reasoned determination that benefits justify costs" (OMB 2017).

An example from health policy illustrates how regulations before 2017 created disproportionate incremental costs and benefits. The Affordable Care Act created an individual mandate in order to reduce the costs of uncompensated care. 45 But the average annual costs of uncompensated care are about \$1,000 per uninsured person (including zeros in the average for those who are uninsured who do not use uncompensated care during the year), whereas the annual economic costs of the individual mandate are over \$3,000 per uninsured person induced to purchase coverage (CEA 2019a).

One economic reason that regulations before 2017 were so costly is that some of them were implemented with only a little "safety valve" in terms of an option for regulated businesses to pay a moderate fine in instances when compliance is especially costly. For example, whereas automobile manufacturers had the option of paying a penalty to the National Highway Traffic Safety Administration (NHTSA) for falling short of Federal fuel economy standards, the EPA is prohibited by the Clean Air Act from adopting the NHTSA's penalty structure to enforce the greenhouse gas standard that began with model year 2012 (75 FR 25482). As another example, a consultant incorrectly filling out DOL Form LM-21 (one of the requirements under the rescinded Persuader Rule) would be exposed to criminal penalties. Another reason is that the labor

⁴⁴ The red line's path in figure 3-6 is drawn as linear for illustration purposes only. The 1.3 percent effect (relative to a freeze) of deregulation is likely nonlinear over time, and it may take more than five years to be fully realized.

⁴⁵ Section 1501(a)(2)(F) of the Patient Protection and Affordable Care Act.

market is arguably the largest market of all, with annual revenues of more than \$10 trillion, and it was the object of active rulemaking by DOL during the Obama Administration.

Conclusion

Coincidentally with the 2017 Presidential inauguration, real GDP growth changed from underperforming experts' forecasts to outperforming them (Tankersley 2019). The CEA's findings on the aggregate effects of regulations and deregulations may help explain this turnaround. Regulatory actions and their aggregate effects may be easily overlooked and underestimated because the actions are numerous and, if not seen through the lens of economic analysis, may appear cryptic to the general public. This chapter helps to narrow this information gap by showing the importance of the deregulatory agenda for everyday Americans as well as the national economy.

Since 2017, consumers and small businesses have been able to live and work with more choice and less Federal government interference. They can purchase health insurance in groups or as individuals without paying for categories of coverage that they do not want or need. Small businesses can design compensation packages that meet the needs of their employees, enter into a genuine franchise relationship with a larger corporation, or seek confidential professional advice on how to organize their workplaces. Consumers have a variety of choices for less expensive wireless and wired Internet access. Small banks are no longer treated as "too big to fail" (which they never actually were) and as subject to the costly regulatory scrutiny that goes with this designation.

In addition to regaining freedoms that they once had, consumers and small businesses no longer need to dread the steady accumulation of costly new Federal regulations. In a time frame of 5 to 10 years, these landmark changes to regulatory policy are anticipated to increase annual incomes by about \$3,100 per household (\$380 billion in the aggregate), by increasing choice, productivity, and competition. This chapter arrives at its aggregate total by building estimates from the industry level. In doing so, it closely examines specific Federal rules, accounts for the unique circumstances of the industries targeted by these rules, and quantifies benefits of regulation—such as consumer data privacy, environmental protection, fuel savings, and reductions in uncompensated healthcare. The analysis employs an economic framework that situates each industry in a larger economy that includes market distortions caused by taxes, imperfect competition, and other factors.

The benefits of the newest wave of deregulation compare favorably with those during the most significant deregulatory waves of American history. Take the deregulation of airlines and trucking that occurred four decades ago, as the major parts of a deregulation wave described as "one of the most important experiments in economic policy of our time" (Winston 1993). Combined, the

Carter Administration's deregulation of these two industries provided net aggregate benefits of about 0.5 percent of national income. Although no 2 of the 20 deregulatory actions analyzed in this chapter have had (according to our estimates) such a large net benefit, their combined net aggregate benefits exceed 0.6 percent of national income.46

Other notable historical deregulations were of natural gas markets between 1985 and 1993, which had benefits estimated at about 0.2 percent of national income (Davis and Kilian 2011). This is hardly more than the combined net benefit of the three health insurance rules analyzed in this chapter. Moreover, the totals reported in this chapter reflect only deregulatory actions occurring during less than three years, whereas the full effects of the deregulation of airlines, trucking, and natural gas each reflect actions taken over almost a decade.47.

There is room for additional deregulation to further grow the economy. increasing benefits to American consumers, workers, and businesses. According to the accounting for Executive Order 13771, the projected cost savings from planned deregulatory actions in FY 2020 exceed the combined cost savings achieved in 2017, 2018, and 2019. The Administration has also taken further steps to promote regulatory reform. On October 9, 2019, President Trump signed two regulatory reform Executive Orders. The first is titled "Promoting the Rule of Law Through Improved Agency Guidance Documents." Many discussions of Federal regulatory and deregulatory actions, including most of this chapter, focus on rules adopted through the Administrative Procedure Act's notice-and-comment rulemaking process. In addition to such rules, Federal agencies issue nonbinding guidance documents. Although guidance documents are not subject to the notice-and-comment requirements, some impose substantial regulatory costs. The new Executive Order's improvements to guidance documents include requirements that clarify their nonbinding status. Significant guidance documents are also now subject to cost-benefit analysis. The second Executive Order, signed on October 9, is titled "Promoting the Rule of Law Through Transparency and Fairness in Civil Administrative Enforcement and Adjudication." In an economic framework, agencies' enforcement strategies can have important implications for regulatory costs (Fenn and Veljanovski 1988). Perhaps more important, the enforcement of regulations should be fair to the public. The new Executive Order "prohibits agencies from enforcing rules they have not made publicly known in advance." Finally, in parallel with the

⁴⁶ Winston (1993, table 6) reports net benefits accruing in the airline and trucking industries that hold aggregate factor supplies constant. In calculating the 0.6 percent for comparison, we also held aggregate factor supplies constant.

⁴⁷ Murphy (2018, 76) cites "U.S. Federal intervention into the petroleum industry in the 1970s [as] arguably the largest peacetime government interference with the economy in the nation's history." Arrow and Kalt (1979) estimate the cost of this intervention to be 0.2 percent of national income. Moreover, the 1979-81 deregulation did not realize this full amount in cost savings because price controls were replaced with a windfall profits tax.

reforms of Federal regulations, the Administration has created the Governors' Initiative on Regulatory Innovation to encourage States to adopt regulatory reforms. The initiative will help governors and the White House work with leaders in local and tribal governments to cut regulatory costs, advance reforms to occupational licensing, and align regulations across levels of government.